

AMENDMENTS TO CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A chimeric molecule comprising ~~an a~~ a peptide angiogenic factor covalently linked to a targeting ~~molecule~~ peptide that specifically binds to a vascular endothelium.

Claim 2 (original): The chimeric molecule of claim 1, wherein the angiogenic factor specifically binds to at least one of VEGF-R1, VEGF-R2, or VEGF-R3.

C3 Claim 3 (currently amended): The chimeric molecule of claim 1, wherein the targeting ~~molecule is a peptide~~ peptide is selected from the group consisting of GGGVFWQ (SEQ ID NO:1), HGRVRPH (SEQ ID NO:2), VVLVTSS (SEQ ID NO:3), CLHRGNSC (SEQ ID NO:4), and CRSWNKADNRSC (SEQ ID NO:5).

Claim 4 (original): The chimeric molecule of claim 1, wherein the angiogenic factor is vascular endothelial growth factor A (VEGF-A), vascular endothelial growth factor A₁₂₁ (VEGF- A₁₂₁), vascular endothelial growth factor A₁₄₅ (VEGF-A₁₄₅), vascular endothelial growth factor A₁₆₅ (VEGF- A₁₆₅), vascular endothelial growth factor A₁₈₉ (VEGF- A₁₈₉), vascular endothelial growth factor A₂₀₆ (VEGF- A₂₀₆), vascular endothelial growth factor B (VEGF-B), vascular endothelial growth factor B₁₆₇ (VEGF- B₁₆₇), vascular endothelial growth factor B₁₈₆ (VEGF-B₁₈₆), vascular endothelial growth factor C (VEGF-C), vascular endothelial growth factor D (VEGF-D), vascular endothelial growth factor E (VEGF-E), placental growth factor (PlGF), acidic fibroblast growth factor (aFGF), basic fibroblast growth factor (bFGF), or angiopoietin-1 (Ang1).

Claim 5 (original): The chimeric molecule of claim 1, wherein the angiogenic factor is Ang2, endostatin or angiostatin.

Claim 6 (currently amended): The chimeric molecule of claim 1 that is a fusion protein, wherein the fusion protein comprises an angiogenic factor linked to a targeting molecule peptide that specifically binds to a vascular endothelium.

Claim 7 (original): The fusion protein of claim 6, wherein the angiogenic factor is VEGF-B, vascular endothelial growth factor B₁₆₇ (VEGF-B₁₆₇), vascular endothelial growth factor B₁₈₆ (VEGF-B₁₈₆), or vascular endothelial growth factor C (VEGF-C).

Claims 15-27 (previously canceled).

Claim 28 (original): A pharmaceutical composition comprising the chimeric molecule of claim 1 and a pharmaceutically acceptable carrier.

Claim 29 (original): A pharmaceutical composition comprising the fusion protein of claim 6.

Claim 30 (new): The chimeric molecule of claim 1, wherein the angiogenic factor is a VEGF homolog.

Claim 31 (new): The chimeric molecule of claim 30, wherein the targeting peptide is selected from the group consisting of GGGVFWQ (SEQ ID NO:1), HGRVRPH (SEQ ID NO:2), VVLVTSS (SEQ ID NO:3), CLHRGNSC (SEQ ID NO:4), and CRSWNKADNRSC (SEQ ID NO:5).

Claim 32 (new): A pharmaceutical composition comprising the chimeric molecule of claim 2 and a pharmaceutically acceptable carrier.

C3
cont

Claim 33 (new): A pharmaceutical composition comprising the chimeric molecule of claim 3 and a pharmaceutically acceptable carrier.

C3
cont

Claim 34 (new): A pharmaceutical composition comprising the chimeric molecule of claim 4 and a pharmaceutically acceptable carrier.

Claim 35 (new): A pharmaceutical composition comprising the chimeric molecule of claim 30 and a pharmaceutically acceptable carrier.
